CONTENTS OF VOLUME 18

Number 1

G. Baselli, S. Cerutti, S. Civardi, A. Malliani, G. Orsi, M. Pagani and G. Rizzo	1	Parameter extraction from heart rate and arterial blood pressure variability signals in dogs for the validation of a physiological model
D. A. Sainsbury, C. J. Gore, R. T. Withers and A. H. Ilsley	17	An on-line microcomputer program for the monitoring of physiological variables during rest and exercise
V. Flook and S. E. Wilcock	25	A computer program to calculate mean skin temperature from measurements available from field trials
M. R. Dambro and M. A. Kallgren	31	Drug interactions in a clinic using COSTAR
P. Cugini, G. Leone, P. Strazzera and T. Kawasaki	39	Stepwise multivariate discriminant analysis (SMDA) for paired and unpaired biomedical data using microcomputers
Software Survey Section	I	Genetics Tutorial—CompTutor Software
		CARDIOLAB
	II	ENZFITTER

Number 2

P. Gualtieri, F. Ghetti, V. Passarelli and L. Barsanti	57	Microorganism track reconstruction: an image processing approach
E. S. Gelsema, H. F. Bao, A. W. M. Smeulders and H. C. den Harink	65	Application of the method of multiple thresholding to white blood cell classification
L. Cornacchia and V. Black	75	Development of stereological analysis software for the calculation of volume, number and surface density
M. B. Merickel, C. S. Carman, J. R. Brookeman, J. P. Mugler, III, M. F. Brown and C. R. Ayers	89	Identification and 3-D quantification of atherosclerosis using magnetic resonance imaging
R. R. Hansebout, M. V. Kamath and R. N. Lamont	103	Monitoring spinal cord blood flow using hydrogen polarography
A. Tramontano and M. F. Macchiato	113	A transportable interactive package for the statistical analysis and handling of sequence data
A. Ayiomamitis and N. C. Sullivan	123	A program for the computation of life tables with fittings to model tables for anthropological studies

G. F. Pinto and E. G. Oestreicher 135 A microcomputer program for fitting two-substrate enzyme rate equations

Software Survey Section I

Number 3

M. J. Katz 145 Fractals and the analysis of waveforms

P. C. Chang, R. Verlinde, T. Bruning and P. van Brummelen 157 A microcomputer-based, R-wave triggered system for hemodynamic measurements in the forearm

M. V. Kamath, E. L. Fallen and D. N. Ghista 165 Microcomputerized on-line evaluation of heart rate variability power spectra in humans

D. M. Wiseman and A. C. C. Gibbs 173 The Gemini conundrum—a problem of unpairable data: statistical comparison of ratios each derived from two separately estimated parameters

P. Byass, P. W. Hanlon, L. C. S. Hanlon, V. M. Marsh and B. M. Greenwood 179 Microcomputer management of a vaccine trial

J. D. Enderle and J. W. Wolfe 195 Frequency response analysis of human saccadic eye movements: estimation of stochastic muscle forces

W. J. Sacco, J. W. Jameson, W. S. Copes and H. R. Champion 221 PARTITION: a quantitative method for evaluating prehospital services for trauma patients

Erratum 229

Software Survey Section

I DR. MEMORY

I CONSULTA

II TESTGEN

II bibIX

III ECOGEN

IV CLINISOFT

Number 4

O. Carlsen 231 Evaluation of forward stroke volume in first-pass radionuclide cardiography

R. E. De Meersman 241 A program in Quickbasic for the estimation of cardiac output

R. G. Duggleby and L. C. Ward 245 Procedures and a computer program for the determination of fractional protein synthetic rates by numerical solution of an implicit equation

D. M. Foster, D. G. Covell and M. Berman 253 Applications of a general method for deconvolution using compartmental analysis

T. D. Lagerlund and F. W. Sharbrough 267 Computer simulation of neuronal circuit models of rhythmic behavior in the electroencephalogram

M. G. Lötter, W. le R. Rabe, J. M. van Zyl, A. du P. Heyns, P. Wessels, H. F. Kotzé and P. C. Minnaar 305 A computer program in compiled basic for the IBM personal computer to calculate the mean platelet survival time with the multiple-hit and weighted mean methods

Announcement 317 Third International Conference on Human–Computer Interaction

Erratum 319

Software Survey Section
I AssayZap
II AUTOBIBLIO
II Enzyme Kinetics Program
III Chromatography Program
IV 2V STAT
IV Meditext Interactive Learning Programs in the Basic Healthcare Sciences
V ChemText
VI GRANT TRACKER[tm]

Number 5

T. W. Blackstad and J. G. Bjaalie 321 Computer programs for neuroanatomy: three-dimensional reconstruction and analysis of populations of cortical neurons and other bodies with a laminar distribution

P. E. Bourne and W. A. Hendrickson 341 Selecting a processor for computations in molecular biophysics

D. Chang, P. S. Hsieh and D. C. Dawson 351 Calcium: a program in basic for calculating the composition of solutions with specified free concentrations of calcium, magnesium and other divalent cations

Xiang-Ming Li, R. M. Schwartz, E. Y. Cesar and H. Y. Wang 367 An integrated microcomputer system using immobilized cellular electrodes for drug screening

W. Schreiner, P. Schindler, J. Schuster, F. Neumann, W. Mohl and E. Wolner 377 Two level entry concept for analog digital conversion package: usage as blackbox or toolkit

Software Survey Section
I TAG Software Development System

II MedUSA version 1.3—Medical Usage of Scientific Algorithms

III 3DIGIT

Number 6

S. S. Work and D. M. Warshaw 385 Detection of surface movements on single smooth muscle cells: digital video microscopy

Z. Liang, R. Jaszczak and H. Hart 395 Study and performance evaluation of statistical methods in image processing

J. Zheng, K. Jiang, D. M. Watterson, T. A. Craig and S. B. Higgins 409 A knowledge-based system for cassette mutagenesis experimental design

W. J. Sacco, J. W. Jameson, W. S. Copes, M. M. Lawnick, S. L. Keast and H. R. Champion 419 Progress toward a new injury severity characterization: severity profiles

R. J. Carter, T. Lukey and F. F. Snyder 431 Physiological amino acid data management: quantitation, assessment, reporting and storage

R. A. Campbell 441 A comparison of the Quade and Friedman tests to the unbalanced two-way analysis of variance with biomedical data

R. E. De Meersman and N. Y. Faroudja 449 Computerized substrate utilization determinations from respiratory functions alone

Zhang Jian-Zhou, Zhao Jing and He Qing-nian 455 EEG findings during special psychical state (Qi Gong state) by means of compressed spectral array and topographic mapping

Software Survey Section I

Title Page, Volume Contents and Author Index i